Supply Chain Management

Department Information

- **Department Chair:**
  Joseph Szmerekovsky, Ph.D.

- **Program Coordinator:**
  Elizabeth Worth

- **Email:**
  elizabeth.worth@ndsu.edu

- **Department Location:**
  Barry Hall/Quentin Burdick Building

- **Department Phone:**
  (701) 231-6038

- **Department Web Site:**
  www.ndsu.edu/business/programs/graduate/mscm/ (http://www.ndsu.edu/business/programs/graduate/mscm/)

- **Application Deadline:**
  July 1 for fall semester; December 1 for spring semester; April 1 for summer semester

- **Credential Offered:**
  M.S.C.M., Certificate - All programs offered online only

- **English Proficiency Requirements:**
  TOEFL iBT 71, IELTS 6; Duolingo 105

The Department of Transportation, Logistics, and Finance offers an online master’s degree in Supply Chain Management (MSCM) and an online graduate certificate in Enterprise Resource Planning (ERP). The degree/certificate is awarded through the College of Business in collaboration with the Upper Great Plains Transportation Institute. The MSCM and ERP programs take an interdisciplinary approach to supply chain, logistics and transportation to attract students with a multitude of backgrounds.

These programs target aspiring supply chain professionals, industry professionals, military officers and Department of Defense civilians who want to meet all the supply chain challenges of the 21st century. A wide range of career opportunities exists in the supply chain industry, including supply chain manager, logistics manager, warehouse/distribution manager, business process improvement analyst, and many more.

**Curriculum Focus**

The uniqueness of the MSCM and ERP programs are reflected in its curriculum focus, which is a direct derivative of the private industry needs and Army’s National Logistics Curriculum. The following focus areas define a framework for expected outcomes and curricula:

- integrated supply chain management
- procurement, sourcing, and financial planning of the supply chain
- supply chain optimization and planning
- global supply chain management
- technology enablers for supply chain
- change management and leadership
- enterprise resource planning including hands-on SAP training and data analytics
- remote sensing and adaptive logistics planning
- transportation analysis and planning for logistics
- emergency management

**Master of Supply Chain Management (MSCM)**

The MSCM is a non-thesis degree. Students will participate in a multitude of interdisciplinary courses that will enhance and develop their supply chain skills, research abilities, and their capacity to apply them in real world situations.

**Certificate in Enterprise Resource Planning (ERP)**

SAP is the leading global provider of ERP software. More than 200,000 organizations around the world use SAP software to streamline the management of their business processes. More than 80% of Fortune 1000 companies use SAP to integrate their business activities. To best use their SAP solutions, organizations need people with ERP knowledge and skill to drive business processes effectively and efficiently.
The MSCM program offers three courses in SAP that will give you the skills needed to be a leader in the next generation of digital enterprise. These graduate-level courses include up to 50 hours of hands-on experience learning enterprise resource integration of supply chain processes such as procurement, material management, production, distribution and fulfillment.

North Dakota State University is a member of the SAP University Alliances, which allows our students to learn by having access to SAP data to manipulate and experience real world situations.

Admission Requirements

Both the Master of Supply Chain Management (MSCM) and the Certificate in Enterprise Resource Planning (ERP) are open to qualified graduates of universities and colleges of recognized standing. To be admitted with full standing, the applicant must:

1. Hold a baccalaureate degree from an educational institution of recognized learning with a minimum grade point average (GPA) of 3.0 or equivalent. For those with GPAs of 2.99 or less, the applicant should consider submitting a GMAT/GRE score to be considered for acceptance.
2. Have shown the potential to undertake advanced study as evidenced by prior academic performance and has stated interest in logistics.
3. Submit official transcripts
4. Submit a two-page resume
5. Submit a one-page “Letter of Intent” outlining their reasons for pursuing the degree/certificate
6. Submit three letters of recommendation (NA for certificate option)
7. Submit online application through the NDSU Graduate School website
8. International applicants whose first language is not English and who do not possess a U.S. bachelor's degree or higher are subject to additional requirements when they apply for admission. They must meet the minimum requirements on measures of general English language proficiency. The accepted measures of language proficiency are the TOEFL iBT 71 and IELTS 6.

Students who do not meet all requirements for admission or have deficiencies in prerequisite course work, but show satisfactory potential for graduate study, may be admitted conditionally. The conditional status may be changed to full graduate standing after the first or second semester of study, based on the student's academic performance.

Apply for Admission

To apply for admission, please visit the Admission Information page (https://bulletin.ndsu.edu/graduate/admission-information/).

Degree Requirements

Master of Supply Chain Management (MSCM)

A minimum of 30 credits is required for the MSCM and must be completed using the combination of core courses and elective courses as listed below. An overall GPA of 3.0 or higher must be maintained to remain in good academic standing.

Certificate in Enterprise Resource Planning (ERP)

The certificate in ERP will consist of TL 715, TL 725, and TL 735. More information can be found in the course list below.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>TL 711</td>
<td>Integrated Supply Chain System</td>
<td>3</td>
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<td>TL 721</td>
<td>Global Supply Chain Management</td>
<td>3</td>
</tr>
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<td>TL 731</td>
<td>Supply Chain Decision Analysis</td>
<td>3</td>
</tr>
<tr>
<td>TL 757</td>
<td>Technologies for Supply Chain Transport Solutions</td>
<td>3</td>
</tr>
<tr>
<td>TL 787</td>
<td>Transportation and Distribution</td>
<td>3</td>
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<td></td>
<td>Elective Courses (15 credits) from those listed below</td>
<td>15</td>
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<tr>
<td>TL 715</td>
<td>Introduction to ERP</td>
<td>3</td>
</tr>
<tr>
<td>TL 725</td>
<td>ERP Configuration</td>
<td>3</td>
</tr>
<tr>
<td>TL 735</td>
<td>Practical Data Analytics</td>
<td>3</td>
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<tr>
<td>MGMT 727</td>
<td>Organizational Change Management</td>
<td>3</td>
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<td>TL 751</td>
<td>Supply Chain Transport Security</td>
<td>3</td>
</tr>
<tr>
<td>TL 789</td>
<td>Managerial Leadership for Supply Chain Professionals</td>
<td>3</td>
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Faculty

Raj Bridgelall, Ph.D.
North Dakota State University, 2015
Research Interests: Big Data Analytics, Internet-of-Things (IoT), Cloud Computing; Connected and Autonomous Vehicles (CAV), Shared Mobility, Intelligent Transportation Solutions; Signal Processing and Mathematical Modeling of Transportation Systems; Remote Sensing with Unmanned Aircraft Systems; Hyperspectral Image Analysis; Radio Frequency Identification (RFID); Real-Time Locating Systems (RTLS); Energy Harvesting and Massive Scale Autonomous Wireless Sensor Networks
Department: Transportation, Logistics, and Finance

Robert Froberg, Ph.D.
North Dakota State University, 2019
Research Interests: Transport of Rolling Stock, Equipment, and Supplies to Austere Locations, Austere Environment Sustainment Planning, Transportation Analysis and Planning for Logistics, Supply Chain Planning, Assessment, and Optimization Leveraging (Big) Data, Modeling of Supply Chains and Transportation Networks
Department: Transportation, Logistics, and Finance

Ranjit Godavarthy, Ph.D.
Kansas State University, 2012
Research Interests: Public Transportation in Small Urban and Rural Areas, Demand Response Transit and Paratransit, Bike Share, Roundabouts, Traffic Engineering and Operations, Transportation and Highway Safety
Department: Transportation, Logistics, and Finance

Pan Lu, Ph.D.
North Dakota State University, 2011
Research Interests: Connected and Autonomous Vehicles, Smart Material and Structure Health Monitoring, Big Data Analytics for Transportation, Smart Transportation, Transportation System, Asset Management, Multimodal Transportation, Geospatial Transportation Modeling
Department: Transportation, Logistics, and Finance

Jeremy Mattson, Ph.D.
North Dakota State University, 2017
Research Interests: Public Transportation, Transportation Economics, Demand Modeling, Travel Behavior, Built Environment
Department: Transportation, Logistics, and Finance

Diomo Motuba, Ph.D.
North Dakota State University, 2009
Research Interests: Transportation and Land Use Planning, Freight Modeling, Transportation Economics, Connected Automated Vehicles, Logistics and Supply Chain Management, Transportation Safety
Department: Transportation, Logistics, and Finance

Tim O. Peterson, Ph.D.
Texas A&M University, 1988
Research Interests: Managerial Leadership, Application of Information Technology to Organizational Issues, Scholarship of Teaching
Department: Management and Marketing

Fred Riggins, Ph.D.
Carnegie Mellon University, 1994
Research Interests: Economics of Information Systems, Interorganization Systems, Adoption of New Technology, Radio Frequency Identification (RFID), Internet-of-Things (IoT), Blockchain, Cryptoeconomics, Information and Communication Technology in Microfinance
Department: Accounting and Information Systems

Robert Swearingen, Ph.D.
North Dakota State University, 2019
Research Interests: Change Management in Supply Chain Organizations, Lean Inventory Management Process Improvement Supported by Value Stream Mapping, Enterprise Information Systems Supporting Supply Chain Management
Department: Transportation, Logistics, and Finance

Joseph Szmerekovsky, Ph.D.
Case Western Reserve University, 2003
Research Interests: Project Management and Scheduling, Supply Chain Management and Technology, Energy Supply Chain Management, Healthcare Logistics
Department: Transportation, Logistics, and Finance

Denver Tolliver, Ph.D.
Virginia Polytechnic Institute and State University, 1989
Research Interests: Highway Systems Modeling, Multimodal Transportation Planning, Freight Transportation, Energy and Environmental Analysis
Department: Transportation, Logistics, and Finance